OHIO STATE ENGINEER

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METALLURGICAL · CIVIL · MECHANICAL · MINING

OHIO STATE UNIVERSITY · LETTERS · SCIENCE · ARTS · AGRICULTURE · KNOWLEDGE · 1870 · COLUMBUS

Brick by Birch page 5

Ha! Ha!

Marker
Schory
Sorensen

McDonald

TEE YOUNG
The First Engineer Football Captain

Marker
Sorensen
Shorey
} Civils

NOVEMBER, 1924

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Member of the Engineering College Magazines Asssociated

C. E. Sherman

The Garment Center Buildings
New York City
WALTER M. MASON, Architect
Drawn by Hugh Ferriss

"Towering Masses"

HERE the new architecture expresses itself in great vigorous masses which climb upward into the sky with a pyramidal profile—gigantic, irregular, arresting. An earlier, conventional building on the near corner is overshadowed, engulfed in towering masses of the newer building which are prophetic of an architecture of the future which is vividly stimulating to the imagination.

Certainly modern invention—modern engineering skill and organization, will prove more than equal to the demands of the architecture of the future.

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What Makes Defense "Air-Tight"?

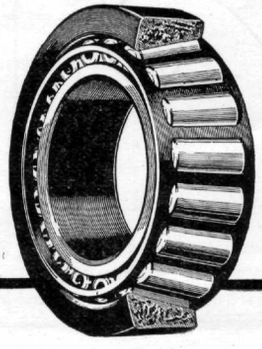
A team with fast, hard-tackling ends and a weak line can no more stop a straight attack, than heavy guards and tackles can break up open plays, when the ends are weak. An "air-tight" defense must stop plays both through the line and from the ends; it must withstand attack from every quarter, just as a good bearing must withstand all loads.

The bearings in the wheels of a motor car, for instance, have a vertical load upon them, represented by the weight of the car. This is termed "radial load". It corresponds in effect to a straight charge by backs upon a football line.

When the car sways, however, or when its course is sharply changed, a part of the weight of the car is thrown sidewise against the bearings in the wheels. This load is called "end thrust". It corresponds in effect to a diagonal attack upon a football line.

In actual operation, a wheel bearing must meet continuously both "radial load" and "end thrust"—must as it were, withstand attack through center, off tackle, or from the ends. Because of its *tapered* principle, a Timken Tapered Roller Bearing withstands, in one bearing, all these loads. It is upon this principle that the unquestioned leadership of Timken Bearings is founded—a leadership extending beyond the automotive field throughout industry generally.

The Timken Roller Bearing Company
CANTON, OHIO



TIMKEN
Tapered
ROLLER BEARINGS